SEQUENCE LISTING

<110> YOUNG, ANDREW
GEDULIN, BRONISLAVA

<120> METHODS FOR GLUCAGON SUPPRESSION

<130> 030639.0031.UTL (249/167 US)

<140> 09/889,331
<141> 2001-07-13

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<151> 2000-01-14

<150> 60/116,380
<151> 1999-01-14

<150> 60/132,017
<151> 1999-04-30

<150> 60/175,365
<151> 2000-01-10

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<222> (39)
<223> Ser in position 39 is amidated

<400> 1
His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

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<213> Heloderma Suspectum

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<221> AMIDATION
<222> (39)
<223> Ser in position 39 is amidated

<400> 2
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser

20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

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<220>
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Amino Acid Sequence

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His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
20 25 30

<210> 4
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Amino Acid Sequence

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<222> (30)
<223> Gly in position 30 is amidated

<400> 4
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
20 25 30

<210> 5
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Construct

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<222> (30)
<223> AMIDATION, Position 30 is Gly-NH2

<400> 5
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
20 25 30

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<220>
<223> Description of Artificial Sequence: Synthetic
Construct

<220>
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<222> (28)
<223> AMIDATION, Position 28 is Asn-NH2

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His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

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<220>
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Construct

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<222> (30)
<223> AMIDATION, Position 30 is Gly-NH2

<400> 7
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

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Construct

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<223> AMIDATION, Position 28 is Asn-NH2

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His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

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His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Ala Ile Glu Phe Leu Lys Asn
20 25

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Construct

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<223> AMIDATION, Position 39 is Ser-NH2

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His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

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His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

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<223> AMIDATION, Position 39 is Ser-NH2

<400> 12
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

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Tyr Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

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<223> AMIDATION, Position 39 is Tyr-NH2

<400> 14
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Tyr
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<400> 15
His Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

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<223> Xaa is naphthylalanine

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 16
His Gly Glu Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
35

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<220>
<223> Description of Artificial Sequence: Synthetic Construct

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<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 17
His Gly Glu Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

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<223> Description of Artificial Sequence: Synthetic Construct

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<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 18
His Gly Glu Gly Thr Phe Ser Thr Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 19
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<220>
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<222> (39)

<223> AMIDATION, Position 39 is Ser-NH2

<400> 19
His Gly Glu Gly Thr Phe Thr Thr Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

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<222> (39)
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<400> 20
His Gly Glu Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

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<222> (39)
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<220>
<221> VARIANT
<222> (10)
<223> Xaa is pentylglycine

<400> 21
His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

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Construct

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<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<220>
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<222> (10)
<223> Xaa is pentylglycine

<400> 22
His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

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<220>
<221> VARIANT
<222> (14)
<223> Xaa is pentylglycine

<400> 23
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

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<222> (14)
<223> Xaa is pentylglycine

<400> 24
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

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Construct

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<222> (39)
<223> AMIDATION, Postion 39 is Ser-NH2

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<221> VARIANT
<222> (22)
<223> Xaa is napthylalanine

<400> 25
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Xaa Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

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Construct

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<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 26
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu

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 1               5                  10                  15

Glu Ala Val Arg Leu Phe Val Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala Pro Pro Pro Ser
        35

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<220>
<223> Description of Artificial Sequence: Synthetic
      Construct

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<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 27
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1               5                  10                  15

Glu Ala Val Arg Leu Phe Val Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala Pro Pro Pro Ser
        35

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<220>
<223> Description of Artificial Sequence: Synthetic
      Construct

<220>
<221> MOD_RES
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<223> AMIDATION, Position 39 is Ser-NH2

<400> 28
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1               5                  10                  15

Glu Ala Val Arg Leu Phe Val Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala Pro Pro Pro Ser
        35

<210> 29
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Construct
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<223> Xaa at position 23 is tertiary-butylglycine

<220>
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<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 29
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Xaa Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

<210> 30
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<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic
      Construct

<220>
<221> MOD_RES
<222> (39)
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<400> 30
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Asp Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
        35

<210> 31
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<220>
<223> Description of Artificial Sequence: Synthetic
      Construct

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<223> AMIDATION, Position 39 is Ser-NH2

<400> 31
His Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser

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            20                  25                  30

Ser Gly Ala Pro Pro Pro Ser
        35

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<220>
<223> Description of Artificial Sequence: Synthetic
      Construct

<220>
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<222> (31)
<223> Xaa at position 31 is thioproline

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36,37 and 38 is thioproline

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 32
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1               5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20                  25                  30

Ser Gly Ala Xaa Xaa Xaa Ser
        35

<210> 33
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<220>
<223> Description of Artificial Sequence: Synthetic
      Construct

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is thioproline

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 33
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1               5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30
```

Ser Gly Ala Xaa Xaa Xaa Ser
35

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<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
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<220>
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<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is homoproline

<220>
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<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 34
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

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<223> Description of Artificial Sequence: Synthetic Construct

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<223> Xaa at positions 36, 37, and 38 is homoproline

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 35
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
        35

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<220>
<223> Description of Artificial Sequence: Synthetic
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<223> Xaa at position 31 is thioproline

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<223> Xaa at positions 36,37, and 38 is thioproline

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 36
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa Xaa Xaa Ser
        35

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<220>
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<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36,37, and 38 is homoproline

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 37
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

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<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is N-methylalanine

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37 and 38 is N-methylalanine

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 38
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

<210> 39
<211> 39
<212> PRT
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<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is N-methylalanine

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 39
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

<210> 40
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<220>
<223> Description of Artificial Sequence: Synthetic Construct

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<223> Xaa at position 31 is N-methylalanine

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is N-methylalanine

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 40
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

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<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (1)
<223> Xaa at position 1 is His, Arg or Tyr

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<222> (2)
<223> Xaa at position 2 is Ser, Gly Ala, or Thr

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<223> Xaa at position 3 is Asp or Glu

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<223> Xaa at position 5 is Ala or Thr

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<222> (6)
<223> Xaa at position 6 is Ala, Phe, Tyr or
napthylalanine

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<222> (7)
<223> Xaa at position 7 is Thr or Ser

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<222> (8)
<223> Xaa at position 8 is Ala, Ser or Thr

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<222> (9)
<223> Xaa at position 9 is Asp or Glu

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<222> (10)
<223> Xaa at position 10 is Ala, Leu, Ile, Val,
pentylglycine, or Met

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<222> (11)
<223> Xaa at position 11 is Ala or Ser

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<222> (12)
<223> Xaa at position 12 is Ala or Lys

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<222> (13)
<223> Xaa at position 13 is Ala or Gln

<220>
<221> VARIANT
<222> (14)
<223> Xaa at position 14 is Ala, Leu, Ile,
pentylglycine, Val or Met

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<222> (15)
<223> Xaa at position 15 is Ala or Glu

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<222> (16)..(17)
<223> Xaa at position 16 and 17 is Ala or Glu

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<221> VARIANT
<222> (19)
<223> Xaa at position 19 is Ala or Val

<220>
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<222> (20)
<223> Xaa at position 20 is Ala or Arg

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<221> VARIANT
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<223> Xaa at position 21 is Ala or Leu

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<222> (22)
<223> Xaa at position 22 is Ala, Phe, Tyr, or
naphthylalanine

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<222> (23)
<223> Xaa at position 23 is Ile, Val, Leu,
pentylglycine, tert-butylglycine, or Met

<220>
<221> VARIANT
<222> (24)
<223> Xaa at position 24 is Ala, Glu, or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa at position 25 is Ala, Trp, Phe, Tyr or
napthylalanine

<220>
<221> VARIANT
<222> (26)
<223> Xaa at position 26 is Ala or Leu

<220>
<221> VARIANT
<222> (27)
<223> Xaa at position 27 is Ala or Lys

<220>
<221> VARIANT
<222> (28)
<223> Xaa at position 28 is Ala or Asn and is optionally
amidated

<220>
<221> VARIANT
<222> (29)
<223> may be absent and if present is optionally amidated

<220>
<221> VARIANT
<222> (30)
<223> may be absent and if present is optionally amidated

<220>

<221> VARIANT
<222> (31)
<223> Xaa at position 31 is Pro, homoproline, thioproline,
N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (32)
<223> may be absent and if present is optionally amidated

<220>
<221> VARIANT
<222> (33)
<223> may be absent and if present is optionally amidated

<220>
<221> VARIANT
<222> (34)
<223> may be absent and if present is optionally amidated

<220>
<221> VARIANT
<222> (35)
<223> may be absent and if present is optionally amidated

<220>
<221> VARIANT
<222> (36)
<223> Xaa at position 36 is Pro, homoproline, thioproline,
N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (37)
<223> Xaa at position 37 is Pro, homoproline, thioproline,
N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (38)
<223> Xaa at position 38 is Pro, homoproline, thioproline,
N-alkylalanine or absent and is optionally amidated

<400> 41
Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa
35

<210> 42
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Construct

<220>
<221> VARIANT
<222> (1)
<223> Xaa at position 1 is His, Arg, Tyr, Ala,
norvaline, Val, or norleucine

<220>
<221> VARIANT
<222> (2)
<223> Xaa at position 2 is Ser, Gly, Ala, or Thr

<220>
<221> VARIANT
<222> (3)
<223> Xaa at position 3 is Ala, Asp, or Glu

<220>
<221> VARIANT
<222> (4)
<223> Xaa at position 4 is Ala, norvaline, Val,
norleucine or Gly

<220>
<221> VARIANT
<222> (5)
<223> Xaa at position 5 is Ala or Thr

<220>
<221> VARIANT
<222> (6)
<223> Xaa at position 6 is Phe, Tyr, or napthylalanine

<220>
<221> VARIANT
<222> (7)
<223> Xaa at position 7 is Thr or Ser

<220>
<221> VARIANT
<222> (8)
<223> Xaa at position 8 is Ala, Ser, or Thr

<220>
<221> VARIANT
<222> (9)
<223> Xaa at position 9 is Ala, norvaline, norleucine,
Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa at position 10 is Ala, Leu, Ile, Val,
pentylglycine, or Met

<220>
<221> VARIANT
<222> (11)
<223> Xaa at position 11 is Ala of Ser

<220>
<221> VARIANT
<222> (12)
<223> Xaa at position 12 is Ala or Lys

<220>
<221> VARIANT
<222> (13)
<223> Xaa at position 13 is Ala or Gln

<220>
<221> VARIANT
<222> (14)
<223> Xaa at position 14 is Ala, Leu, Ile,
pentylglycine, Val or Met

<220>
<221> VARIANT
<222> (15)..(17)
<223> Xaa at positions 15, 16, and 17 is Ala or Glu

<220>
<221> VARIANT
<222> (19)
<223> Xaa at position 19 is Ala or Val

<220>
<221> VARIANT
<222> (20)
<223> Xaa at position 20 is Ala or Arg

<220>
<221> VARIANT
<222> (21)
<223> Xaa at position 21 is Ala or Leu

<220>
<221> VARIANT
<222> (22)
<223> Xaa at position 22 is Phe, Tyr or napthylalanine

<220>
<221> VARIANT
<222> (23)
<223> Xaa at position 23 is Ile, Val, Leu,
pentylglycine, tert-butylglycine or Met

<220>
<221> VARIANT
<222> (24)
<223> Xaa at position 24 is Ala, Glu or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa at position 25 is Ala, Trp, Phe, Tyr or
napthylalanine

<220>
<221> VARIANT
<222> (26)
<223> Xaa at position 26 is Ala or Leu

<220>
<221> VARIANT
<222> (27)
<223> Xaa at position 27 is Ala or Lys

<220>

<221> VARIANT
<222> (28)
<223> Xaa at position 28 is Ala or Asn

<220>
<221> VARIANT
<222> (29)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (30)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is Pro, homoproline, 3Hyp, 4Hyp, thiproline
N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent

<220>
<221> VARIANT
<222> (32)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (33)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (34)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (35)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (36)
<223> Xaa at position 36 is Pro, homoproline, 3Hyp, 4Hyp, thiproline
N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent
and is optionally amidated

<220>
<221> VARIANT
<222> (37)
<223> Xaa at position 37 is Pro, homoproline, 3Hyp, 4Hyp, thiproline
N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent
and is optionally amidated

<220>
<221> VARIANT
<222> (38)
<223> Xaa at position 38 is Pro, homoproline, 3Hyp, 4Hyp, thiproline
N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent
and is optionally amidated

<220>
<221> VARIANT
<222> (39)

<223> Xaa at position 39 is Ser, Tyr or absent and is optionally amidated

<400> 42
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Xaa
35

<210> 43
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (1)
<223> Xaa at position1 is His or Arg

<220>
<221> VARIANT
<222> (2)
<223> Xaa at position 2 is Gly or Ala

<220>
<221> VARIANT
<222> (3)
<223> Xaa at position 3 is Asp or Glu

<220>
<221> VARIANT
<222> (5)
<223> Xaa at position 5 is Ala or Thr

<220>
<221> VARIANT
<222> (6)
<223> Xaa at position 6 is Ala, Phe, or napthylalanine

<220>
<221> VARIANT
<222> (7)
<223> Xaa at position 7 is Ser, or Thr

<220>
<221> VARIANT
<222> (8)
<223> Xaa at position 8 is Ala, Ser, or Thr

<220>
<221> VARIANT
<222> (9)
<223> Xaa at position 9 is Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa at position 10 is Ala, Leu, or pentylglycine

<220>
<221> VARIANT
<222> (11)
<223> Xaa at position 11 is Ala or Ser

<220>
<221> VARIANT
<222> (12)
<223> Xaa at position 12 is Ala or Lys

<220>
<221> VARIANT
<222> (13)
<223> Xaa at position 13 Ala or Gln

<220>
<221> VARIANT
<222> (14)
<223> Xaa at position 14 is Ala, Leu or pentylglycine

<220>
<221> VARIANT
<222> (15)..(17)
<223> Xaa at positions 15, 16, and 17 is Ala or Glu

<220>
<221> VARIANT
<222> (19)
<223> Xaa at position 19 is Ala or Val

<220>
<221> VARIANT
<222> (20)
<223> Xaa at position 20 is Ala or Arg

<220>
<221> VARIANT
<222> (21)
<223> Xaa at position 21 is Ala or Leu

<220>
<221> VARIANT
<222> (22)
<223> Xaa at position 22 is Phe or napthylalanine

<220>
<221> VARIANT
<222> (23)
<223> Xaa at position 23 is Ile, Val or
tert-butylglycine

<220>
<221> VARIANT
<222> (24)
<223> Xaa at position 24 is Ala, Glu or Asp

<220>
<221> VARIANT
<222> (25)

<223> Xaa at position 25 is Ala, Trp or Phe

<220>
<221> VARIANT
<222> (26)
<223> Xaa at position 26 is Ala or Leu

<220>
<221> VARIANT
<222> (27)
<223> Xaa at position is Ala or Lys

<220>
<221> VARIANT
<222> (28)
<223> Xaa at position 28 is Ala or Asn

<220>
<221> VARIANT
<222> (29)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (30)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is Pro, homoproline, 3Hyp, 4Hyp, thiproline
N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent
and is optionally amidated

<220>
<221> VARIANT
<222> (32)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (33)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (34)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (35)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (36)
<223> Xaa at position 36 is Pro, homoproline, 3Hyp, 4Hyp, thiproline
N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent
and is optionally amidated

<220>
<221> VARIANT
<222> (37)

<223> Xaa at position 37 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (38)
<223> Xaa at position 38 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<400> 43
Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa
35

<210> 44
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 is His or Ala

<220>
<221> VARIANT
<222> (2)
<223> Xaa in position 2 is Gly or Ala

<220>
<221> VARIANT
<222> (3)
<223> Xaa in position 3 is Ala, Asp or Glu

<220>
<221> VARIANT
<222> (4)
<223> Xaa in position 4 is Ala or Gly

<220>
<221> VARIANT
<222> (5)
<223> Xaa in position 5 is Ala or Thr

<220>
<221> VARIANT
<222> (6)
<223> Xaa in position 6 is Phe or napthylalanine

<220>
<221> VARIANT

<222> (7)
<223> Xaa in position 7 is Thr or Ser

<220>
<221> VARIANT
<222> (8)
<223> Xaa in position 8 is Ala, Ser or Thr

<220>
<221> VARIANT
<222> (9)
<223> Xaa in position 9 is Ala, Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa in position 10 is Ala, Leu or pentylglycine

<220>
<221> VARIANT
<222> (11)
<223> Xaa in position 11 is Ala or Ser

<220>
<221> VARIANT
<222> (12)
<223> Xaa in position 12 is Ala or Lys

<220>
<221> VARIANT
<222> (13)
<223> Xaain position 13 is Ala or Gln

<220>
<221> VARIANT
<222> (14)
<223> Xaa in position 14 is Ala, Leu, Met or
pentylglycine

<220>
<221> VARIANT
<222> (15)..(17)
<223> Xaa in positions 15, 16 & 17 is Ala or Glu

<220>
<221> VARIANT
<222> (19)
<223> Xaa in position 19 is Ala or Val

<220>
<221> VARIANT
<222> (20)
<223> Xaa in position 20 is Ala or Arg

<220>
<221> VARIANT
<222> (21)
<223> Xaa in position 21 is Ala or Leu

<220>
<221> VARIANT
<222> (22)
<223> Xaa at position 22 is Phe or napthylalanine

<220>
<221> VARIANT
<222> (23)
<223> Xaa at position 23 is Ile, Val or
tert-butylglycine

<220>
<221> VARIANT
<222> (24)
<223> Xaa at position 24 is Ala, Glu or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa at position 25 is Ala, Trp or Phe

<220>
<221> VARIANT
<222> (26)
<223> Xaa at position 26 is Ala or Leu

<220>
<221> VARIANT
<222> (27)
<223> Xaa at position 27 is Ala or Lys

<220>
<221> VARIANT
<222> (28)
<223> Xaa at position 28 is Ala or Asn

<220>
<221> VARIANT
<222> (29)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (30)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is Pro, homoproline, 3Hyp, 4Hyp, thiproline
N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent
and is optionally amidated

<220>
<221> VARIANT
<222> (32)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (33)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (34)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (35)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (36)
<223> Xaa at position 36 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (37)
<223> Xaa at position 37 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (38)
<223> Xaa at position 38 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (39)
<223> may be absent and is optionally amidated

<400> 44
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1   5   10   15

Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa Xaa Xaa Ser
        35

<210> 45
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 is His, Arg, Tyr or 4-imidazopropionyl

<220>
<221> VARIANT
<222> (2)
<223> Xaa in positon 2 is Ser, Gly, Ala or Thr

<220>

<221> VARIANT
<222> (3)
<223> Xaa in position 3 is Asp or Glu

<220>
<221> VARIANT
<222> (5)
<223> Xaa in position 5 is Ala or Thr

<220>
<221> VARIANT
<222> (6)
<223> Xaa in position 6 is Ala, Phe, Tyr or
napthylalanine

<220>
<221> VARIANT
<222> (7)
<223> Xaa in position 8 is Thr or Ser

<220>
<221> VARIANT
<222> (8)
<223> Xaa in position 8 is Ala, Ser or Thr

<220>
<221> VARIANT
<222> (9)
<223> Xaa in position 9 is Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa in position 10 is Ala, Leu, Ile, Val,
pentylglycine or Met

<220>
<221> VARIANT
<222> (11)
<223> Xaa in position 11 is Ala or Ser

<220>
<221> VARIANT
<222> (12)
<223> Xaa in position 12 is Ala or Lys

<220>
<221> VARIANT
<222> (13)
<223> Xaa in position 13 is Ala or Gln

<220>
<221> VARIANT
<222> (14)
<223> Xaa in position 14 is Ala, Leu, Ile,
pentylglycine, Val or Met

<220>
<221> VARIANT
<222> (15)..(17)
<223> Xaa in positions 15, 16 & 17 is Ala or Glu

<220>
<221> VARIANT

<222> (19)
<223> Xaa in position 19 is Ala or Val

<220>
<221> VARIANT
<222> (20)
<223> Xaa in position 20 is Ala or Arg

<220>
<221> VARIANT
<222> (21)
<223> Xaa in position 21 is Ala, Leu, Lys-NH3-R where R
is Lys, Arg, C1-C10 straight chain or branched
alkanoyl or cycloalkanoyl

<220>
<221> VARIANT
<222> (22)
<223> Xaa in position 22 is Phe, Tyr, or naphthylalanine

<220>
<221> VARIANT
<222> (23)
<223> Xaa at position 23 is Ile, Val, Leu, pentylglycine,

tert-butylglycine or Met

<220>
<221> VARIANT
<222> (24)
<223> Xaa at position 24 is Ala, Glu or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa at position 25 is Ala, Trp, Phe, Tyr or
naphthylalanine

<220>
<221> VARIANT
<222> (26)
<223> Xaa at position 26 is Ala or Leu

<220>
<221> VARIANT
<222> (27)
<223> Xaa at position 27 is Lys, Asn, Ala, Lys-NH-epsilon-R
where R is Lys, Arg, C1-C10 straight chain or
branched alkanoyl or cycloalkylalkanoyl and is
optionally amidated

<220>
<221> VARIANT
<222> (28)
<223> Xaa at position 28 is Lys, Asn, Ala, Lys-NH-epsilon-R
where R is Lys, Arg, C1-C10 straight chain or
branched alkanoyl or cycloalkylalkanoyl and is
optionally amidated

<220>
<221> VARIANT
<222> (29)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (30)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (32)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (33)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (34)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (35)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (36)
<223> Xaa at position 36 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (37)
<223> Xaa at position 37 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (38)
<223> Xaa at position 38 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<400> 45
Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1   5   10   15

Xaa Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa Xaa Xaa
        35

<210> 46
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 is His, Arg, Tyr, Ala, norvaline, Val norleucine, or 4-imidazopropionyl

<220>
<221> VARIANT
<222> (2)
<223> Xaa in position 2 is Ser, Gly, Ala, or Thr

<220>
<221> VARIANT
<222> (3)
<223> Xaa in position 3 is Ala, Asp, or Glu

<220>
<221> VARIANT
<222> (4)
<223> Xaa in position 4 is Ala, norvaline, Val, norleucine or Gly

<220>
<221> VARIANT
<222> (5)
<223> Xaa in position 5 is Ala or Thr

<220>
<221> VARIANT
<222> (6)
<223> Xaa in position 6 is Phe, Tyr or napthylalanine

<220>
<221> VARIANT
<222> (7)
<223> Xaa in position 7 is Thr or Ser

<220>
<221> VARIANT
<222> (8)
<223> Xaa in position 8 is Ala, Ser or Thr

<220>
<221> VARIANT
<222> (9)
<223> Xaa in position 9 is Ala, Norvaline, Val, Norleucine, Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa in position 10 is Ala, Leu, Ile, Val pentylglycine or Met

<220>
<221> VARIANT
<222> (11)
<223> Xaa in position 11 is Ala or Ser

<220>
<221> VARIANT
<222> (12)
<223> Xaa in position 12 is Ala or Lys

<220>
<221> VARIANT
<222> (13)
<223> Xaa in position 13 is Ala or Gln

<220>
<221> VARIANT
<222> (14)
<223> Xaa in position 14 is Ala, Leu, Ile, pentylglycine
Val or Met

<220>
<221> VARIANT
<222> (15)..(17)
<223> Xaa in positions 15, 16 & 17 stands for Ala or Glu

<220>
<221> VARIANT
<222> (19)
<223> Xaa in position 19 is Ala or Val

<220>
<221> VARIANT
<222> (20)
<223> Xaa in position 20 is Ala or Arg

<220>
<221> VARIANT
<222> (21)
<223> Xaa in position 21 is Ala, Leu or Lys-NH3 where R
is Lys, Arg, C1-C10 straight chain or branched
alkanoyl or cycloalleyl-alkanoyl

<220>
<221> VARIANT
<222> (22)
<223> Xaa at position 22 is Phe, Tyr or naphthylalanine

<220>
<221> VARIANT
<222> (23)
<223> Xaa at position 23 is Ile, Val, Leu, pentylglycine,
tert-butylglycine or Met

<220>
<221> VARIANT
<222> (24)
<223> Xaa at position 24 is Ala, Glu or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa at position 25 is Ala, Trp, Phe, Tyr

or naphthylalanine

<220>
<221> VARIANT
<222> (26)
<223> Xaa at position 26 is Ala or Leu

<220>
<221> VARIANT
<222> (27)
<223> Xaa at position 27 is Lys, Asn, Ala, Lys-NH-epsilon-R
where R is Lys, Arg, C1-C10 straight chain or
branched alkanoyl or cycloalkylalkanoyl and is
optionally amidated

<220>
<221> VARIANT
<222> (28)
<223> Xaa at position 28 is Lys, Asn, Ala, Lys-NH-epsilon-R
where R is Lys, Arg, C1-C10 straight chain or
branched alkanoyl or cycloalkylalkanoyl and is
optionally amidated

<220>
<221> VARIANT
<222> (29)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (30)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is Pro, homoproline, 3Hyp, 4Hyp, thiproline
N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent
and is optionally amidated

<220>
<221> VARIANT
<222> (32)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (33)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (34)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (35)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (36)
<223> Xaa at position 36 is Pro, homoproline, 3Hyp, 4Hyp, thiproline

N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (37)
<223> Xaa at position 37 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (38)
<223> Xaa at position 38 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (39)
<223> Xaa at position 39 is Ser, Tyr or absent and is optionally amidated

<400> 46
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1   5   10   15

Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa Xaa Xaa Xaa
        35

<210> 47
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 is His, Arg or Thr

<220>
<221> VARIANT
<222> (2)
<223> Xaa in position 2 is Ser, Gly, Ala, or Thr

<220>
<221> VARIANT
<222> (3)
<223> Xaa in position 3 is Asp or Glu

<220>
<221> VARIANT
<222> (6)
<223> Xaa in position 6 is Phe, Tyr or naphthalanine

<220>
<221> VARIANT
<222> (7)
<223> Xaa in position 7 is Thr or Ser

<220>
<221> VARIANT
<222> (8)
<223> Xaa in position 8 is Ser or Thr

<220>
<221> VARIANT
<222> (9)
<223> Xaa in position 9 is Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa in position 10 is Leu, Ile, Val, pentylglycine
or Met

<220>
<221> VARIANT
<222> (14)
<223> Xaa at position 14 is Leu, Ile, pentylglycine,
Val or Met

<220>
<221> VARIANT
<222> (22)
<223> Xaa in position 22 is Phe, Tyr or naphthylalanine

<220>
<221> VARIANT
<222> (23)
<223> Xaa in position 23 is Ile, Val, Leu,
pentylglycine, tert-butylglycine or Met

<220>
<221> VARIANT
<222> (24)
<223> Xaa in position 24 is Glu or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa in position 25 is Trp, Phe, Tyr or
naphthylalanine

<220>
<221> VARIANT
<222> (31)
<223> Xaa in position 31 is independently Pro,
homoproline, 3-hydroxproline, 4-hydroxyproline,
thioproline, N-alkylglycine, N-alkylpentylglycine
or N-alkylalanine

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa in positions 36, 37 & 38 is independently Pro,
homoproline, 3-hydroxyproline, 4-hydroxproline,
thioproline, N-alkylglycine, N-alkylpentylglycine

or N-alkylalanine

<220>
<221> VARIANT
<222> (39)
<223> Xaa in position 39 is Ser, Thr or Tyr and is optionally amidated

<400> 47
Xaa Xaa Xaa Gly Thr Xaa Xaa Xaa Xaa Xaa Ser Lys Gln Xaa Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Xaa Xaa Xaa Xaa Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Xaa
35

<210> 48
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 is His, Arg, Tyr or 4-imidazopropionyl

<220>
<221> VARIANT
<222> (2)
<223> Xaa in position 2 is Ser, Gly, Ala or Thr

<220>
<221> VARIANT
<222> (3)
<223> Xaa in position 3 is Asp or Glu

<220>
<221> VARIANT
<222> (6)
<223> Xaa in position 6 is Phe, Tyr or naphthylalanine

<220>
<221> VARIANT
<222> (7)..(8)
<223> Xaa in positions 7 & 8 is Thr or Ser

<220>
<221> VARIANT
<222> (9)
<223> Xaa in position 9 is Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa in position 10 is Leu, Ile, Val, pentylglycine

or Met

<220>
<221> VARIANT
<222> (14)
<223> Xaa at position 14 is Leu, Ile, pentylglycine,
Val or Met

<220>
<221> VARIANT
<222> (22)
<223> Xaa in position 22 is Phe, Tyr or naphthylalanine

<220>
<221> VARIANT
<222> (23)
<223> Xaa in position 23 is Ile, Val, Lu, pentylglycine,
tert-butylglycine or Met

<220>
<221> VARIANT
<222> (24)
<223> Xaa in position 24 is Glu or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa in position 25 is Trp, Phe, Tyr, or
naphthylalanine

<220>
<221> VARIANT
<222> (27)
<223> Xaa at position 27 is Lys, Asn, Ala, Lys-NH-epsilon-R
where R is Lys, Arg, C1-C10 straight chain or
branched alkanoyl or cycloalkylalkanoyl

<220>
<221> VARIANT
<222> (28)
<223> Xaa at position 28 is Lys, Asn, Ala, Lys-NH-epsilon-R
where R is Lys, Arg, C1-C10 straight chain or
branched alkanoyl or cycloalkylalkanoyl

<220>
<221> VARIANT
<222> (31)
<223> Xaa in position is independently Pro,
homoproline, 3-hydroxproline, 4-hydroxyproline,
thioproline, N-alkylglycine, N-alkylpentylglycine
or N-alkylalanine

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa in positions 36-38 is independently Pro,
homoproline, 3-hydroxproline, 4-hydroxyproline,
thioproline, N-alkylglycine, N-alkylpentylglycine
or N-alkylalanine

<220>
<221> VARIANT

<222> (39)
<223> Xaa in position 39 is Ser, Thr or Tyr and is optionally amidated

<400> 48
Xaa Xaa Xaa Gly Thr Xaa Xaa Xaa Xaa Xaa Ser Lys Gln Xaa Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Xaa Xaa Xaa Xaa Leu Xaa Xaa Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Xaa
35

<210> 49
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Amino Acid Sequence

<220>
<221> AMIDATION
<222> (30)
<223> Gly in position 30 is amidated

<400> 49
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
20 25 30

<210> 50
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 50
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 51
<211> 28
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 51
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 52
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 52
His Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 53
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 53
His Gly Glu Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 54
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 54
His Gly Glu Gly Thr Ala Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 55
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 55
His Gly Glu Gly Thr Phe Thr Ala Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 56
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 56
His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 57
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 57
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ala Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 58
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 58
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Ala Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 59
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 59
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Ala Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 60
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 60
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 61
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 61
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Ala Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 62
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 62
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Ala
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 63
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>

<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 63
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Ala Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 64
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 64
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Ala Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 65
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 65
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Ala Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 66
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION

<222> (28)
<223> Asn in position 28 is amidated

<400> 66
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Ala Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 67
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 67
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Ala Phe Leu Lys Asn
            20   25

<210> 68
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 68
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Ala Leu Lys Asn
            20   25

<210> 69
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)

<223> Asn in position 28 is amidated

<400> 69
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Ala Lys Asn
            20   25

<210> 70
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 70
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Ala Asn
            20   25

<210> 71
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Ala in position 28 is amidated

<400> 71
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Ala
            20   25

<210> 72
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (38)
<223> Pro in position 38 is amidated

<400> 72
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30
Ser Gly Ala Pro Pro Pro
        35

<210> 73
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (38)
<223> Pro in position 38 is amidated

<400> 73
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro
        35

<210> 74
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (37)
<223> Pro in position 37 is amidated

<400> 74
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro
        35

<210> 75
<211> 37
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (37)
<223> Pro in position 37 is amidated

<400> 75
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro
35

<210> 76
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (36)
<223> Pro in position 36 is amidated

<400> 76
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro
35

<210> 77
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (36)
<223> Pro in position 36 is amidated

<400> 77
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro

35

<210> 78
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (35)
<223> Ala in position 35 is amidated

<400> 78
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala
35

<210> 79
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (35)
<223> Ala in position 35 is amidated

<400> 79
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala
35

<210> 80
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (34)
<223> Gly in position 34 is amidated

<400> 80
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly

<210> 81
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (34)
<223> Gly in position 34 is amidated

<400> 81
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly

<210> 82
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (33)
<223> Ser in position 33 is amidated

<400> 82
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser

<210> 83
<211> 33
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (33)
<223> Ser in position 33 is amidated

<400> 83
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser

<210> 84
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (32)
<223> Ser in position 32 is amidated

<400> 84
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

<210> 85
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (32)
<223> Ser in position 32 is amidated

<400> 85
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

<210> 86
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (31)
<223> Pro in position 31 is amidated

<400> 86
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro
20 25 30

<210> 87
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
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Amino Acid Sequence

<220>
<221> AMIDATION
<222> (31)
<223> Pro in position 31 is amidated

<400> 87
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro
20 25 30

<210> 88
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (30)
<223> Gly in position 30 is amidated

<400> 88
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly
20 25 30

<210> 89
<211> 29
<212> PRT
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<220>
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Amino Acid Sequence

<220>
<221> AMIDATION
<222> (29)
<223> Gly in position 29 is amidated

<400> 89
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly
20 25

<210> 90
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (29)
<223> Gly in position 29 is amidated

<400> 90
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly
20 25

<210> 91
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
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Amino Acid Sequence

<220>
<221> VARIANT
<222> (31)
<223> Xaa in position 31 is tPro

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa in positions 36-38 is tPro

<220>
<221> AMIDATION
<222> (38)
<223> tPro in postion 38 is amidated

<400> 91
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa
35

<210> 92
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (36)...(38)
<223> Xaa in positions 36-38 is tPro

<220>
<221> AMIDATION
<222> (38)
<223> tPro in position 38 is amidated

<400> 92
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa
35

<210> 93
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (31)
<223> Xaa in position 31 stands for Nme

<220>
<221> AMIDATION
<222> (37)
<223> Pro in position 37 is amidated

<400> 93
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Pro Pro

35

<210> 94
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (31)
<223> Xaa in position 31 is Nme

<220>
<221> VARIANT
<222> (36)..(37)
<223> Xaa in positions 36-37 is Nme

<220>
<221> AMIDATION
<222> (37)
<223> Nme in position 37 is amidated

<400> 94
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa
35

<210> 95
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (31)
<223> Xaa in position 31 stands for hPro

<220>
<221> VARIANT
<222> (36)..(37)
<223> Xaa in positions 36-37 stands for hPro

<220>
<221> AMIDATION
<222> (37)
<223> hPro in position 37 is amidated

<400> 95
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa
35

<210> 96
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (31)
<223> Xaa in position 31 stands for hPro

<220>
<221> VARIANT
<222> (36)
<223> Xaa in position 36 stands for hPro

<220>
<221> AMIDATION
<222> (36)
<223> hPro in position 36 is amidated

<400> 96
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa
35

<210> 97
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (35)
<223> Ala in position 35 is amidated

<400> 97
Arg Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala
35

<210> 98
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (30)
<223> Gly in position 30 is amidated

<400> 98
His Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
20 25 30

<210> 99
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (6)
<223> Xaa in position 6 stands for naph

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 99
His Gly Glu Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 100
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 100
His Gly Glu Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu

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 1               5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20                  25

<210> 101
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 101
His Gly Glu Gly Thr Phe Ser Thr Asp Leu Ser Lys Gln Met Glu Glu
 1               5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20                  25

<210> 102
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 102
His Gly Glu Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Ala Glu
 1               5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20                  25

<210> 103
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (10)
<223> Xaa in position 10 stands for pGly

<220>
<221> AMIDATION
<222> (28)
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<223> Asn in position 28 is amidated

<400> 103
His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 104
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (22)
<223> Xaa in position 22 stands for naph

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 104
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Xaa Ile Glu Phe Leu Lys Asn
            20   25

<210> 105
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (23)
<223> Xaa in position 23 stands for tBug

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 105
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Asn
            20   25

<210> 106
<211> 28
<212> PRT

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 106
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Asp Phe Leu Lys Asn
20 25

<210> 107
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (33)
<223> Ser in position 33 is amidated

<400> 107
His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser

<210> 108
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (29)
<223> Gly in position 29 is amidated

<400> 108
His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly
20 25

<210> 109

<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (31)
<223> Xaa in position 31 stands for hPro

<220>
<221> VARIANT
<222> (36)..(37)
<223> Xaa in positions 36-37 stands for hPro

<220>
<221> AMIDATION
<222> (37)
<223> hPro in position 37 is amidated

<400> 109
His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa
35

<210> 110
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for
4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (26)
<223> Xaa in position 26 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (27)
<223> Asn in position 27 is amidated

<400> 110
Xaa Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Trp Leu Xaa Asn
20 25

<210> 111
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for
4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (26)
<223> Xaa in position 26 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (27)
<223> Asn in position 27 is amidated

<400> 111
Xaa Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Phe Leu Xaa Asn
20 25

<210> 112
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for
4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (26)
<223> Xaa in position 26 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (29)
<223> Gly in position 29 is amidated

<400> 112
Xaa Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Trp Leu Xaa Asn Gly Gly
20 25

<210> 113
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for
4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (26)
<223> Xaa in position 26 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (29)
<223> Gly in position 29 is amidated

<400> 113
Xaa Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Phe Leu Xaa Asn Gly Gly
20 25

<210> 114
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for
4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (27)
<223> Xaa in position 27 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (27)
<223> Lys-NH(epsilon) octanoyl in position 27 is amidated

<400> 114
Xaa Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Trp Leu Asn Xaa
20 25

<210> 115
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for
4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (27)
<223> Xaa in position 27 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (27)
<223> Lys-NH(epsilon) octanoyl in position 27 is amidated

<400> 115
Xaa Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Phe Leu Asn Xaa
20 25

<210> 116
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for
4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (27)
<223> Xaa in position 27 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (29)
<223> Gly in position 29 is amidated

<400> 116
Xaa Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Trp Leu Asn Xaa Gly Gly
20 25

<210> 117
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
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<222> (1)
<223> Xaa in position 1 stands for
4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (27)
<223> Xaa in position 27 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (29)
<223> Gly in postion 29 is amidated

<400> 117
Xaa Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Phe Leu Asn Xaa Gly Gly
20 25

<210> 118
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 118
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 119
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>

<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 119
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 120
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 120
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 121
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 121
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 122
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION

<222> (28)
<223> Asn in position 28 is amidated

<400> 122
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 123
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 123
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 124
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 124
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 125
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)

<223> Asn in position 28 is amidated

<400> 125
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 126
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 126
His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 127
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 127
Ala Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 128
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 128
Ala Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 129
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 129
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 130
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
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<222> (28)
<223> Asn in position 28 is amidated

<400> 130
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 131
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
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      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 131
Ala Gly Asp Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 132
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 132
Ala Gly Asp Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 133
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (6)
<223> Xaa in position 6 stands for Nala

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 133
Ala Gly Asp Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 134
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
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      Amino Acid Sequence

<220>

<221> VARIANT
<222> (6)
<223> Xaa in position 6 stands for Nala

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 134
Ala Gly Asp Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 135
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 135
Ala Gly Asp Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 136
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 136
Ala Gly Asp Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 137
<211> 28
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 137
Ala Gly Asp Gly Thr Phe Thr Ala Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 138
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 138
Ala Gly Asp Gly Thr Phe Thr Ala Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 139
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 139
Ala Gly Asp Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 140
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 140
Ala Gly Asp Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 141
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 141
Ala Gly Asp Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 142
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 142
Ala Gly Asp Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 143
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 143
Ala Gly Asp Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 144
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 144
Ala Gly Asp Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 145
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (10)
<223> Xaa in position 10 stands for Pgly

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 145
Ala Gly Asp Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 146
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (10)
<223> Xaa in position 10 stands for Pgly

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 146
Ala Gly Asp Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 147
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 147
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ala Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 148
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 148
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ala Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 149
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 149
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Ala Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 150
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 150
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Ala Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 151
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 151
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Ala Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 152

<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 152
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Ala Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 153
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 153
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 154
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 154
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Ala Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 155
<211> 28

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (14)
<223> Xaa in position 14 stands for pGly

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 155
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 156
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (14)
<223> Xaa in position 14 stands for pGly

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 156
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Xaa Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 157
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 157
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Ala Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 158
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 158
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Ala Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 159
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 159
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Ala
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 160
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 160
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Ala
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 161
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 161
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Ala Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn
            20   25

<210> 162
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 162
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Ala Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
            20   25

<210> 163
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 163

Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Ala Arg Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 164
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 164
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Ala Arg Leu Phe Ile Glu Phe Leu Lys Asn
20 25

<210> 165
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 165
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Ala Leu Phe Ile Glu Trp Leu Lys Asn
20 25

<210> 166
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 166
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu

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 1               5                  10                  15

Glu Ala Val Ala Leu Phe Ile Glu Phe Leu Lys Asn
            20                  25

<210> 167
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 167
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1               5                  10                  15

Glu Ala Val Arg Ala Phe Ile Glu Trp Leu Lys Asn
            20                  25

<210> 168
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 168
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1               5                  10                  15

Glu Ala Val Arg Ala Phe Ile Glu Phe Leu Lys Asn
            20                  25

<210> 169
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (22)
<223> Xaa in position 22 stands for Nala

<220>
<221> AMIDATION
<222> (28)
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<223> Asn in position 28 is amidated

<400> 169
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Xaa Ile Glu Trp Leu Lys Asn
            20   25

<210> 170
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (22)
<223> Xaa in position 22 stands for Nala

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 170
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Xaa Ile Glu Phe Leu Lys Asn
            20   25

<210> 171
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 171
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Val Glu Trp Leu Lys Asn
            20   25

<210> 172
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 172
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Val Glu Phe Leu Lys Asn
            20   25

<210> 173
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (23)
<223> Xaa in position 23 stands for tGly

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 173
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Asn
            20   25

<210> 174
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (23)
<223> Xaa in position 23 stands for tGly

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 174
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Xaa Glu Phe Leu Lys Asn
            20   25

<210> 175
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 175
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Asp Trp Leu Lys Asn
20 25

<210> 176
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 176
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Asp Phe Leu Lys Asn
20 25

<210> 177
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 177
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Ala Leu Lys Asn
20 25

<210> 178
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 178
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Ala Leu Lys Asn
20 25

<210> 179
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 179
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Ala Lys Asn
20 25

<210> 180
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 180
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Ala Lys Asn
20 25

<210> 181

<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 181
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Ala Asn
20 25

<210> 182
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 182
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Ala Asn
20 25

<210> 183
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Ala in position 28 is amidated

<400> 183
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Ala
20 25

<210> 184
<211> 28

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (28)
<223> Ala in position 28 is amidated

<400> 184
Ala Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Ala
20 25

<210> 185
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (38)
<223> Pro in position 38 is amidated

<400> 185
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30
Ser Gly Ala Pro Pro Pro
35

<210> 186
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (38)
<223> Pro in position 38 is amidated

<400> 186
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30
Ser Gly Ala Pro Pro Pro
35

<210> 187
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (37)
<223> Pro in position 37 is amidated

<400> 187
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30
Ser Gly Ala Pro Pro
35

<210> 188
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (36)
<223> Pro in position 36 is amidated

<400> 188
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro
35

<210> 189
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (36)
<223> Pro in position 36 is amidated

<400> 189
Ala Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu

```
 1               5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala Pro
        35

<210> 190
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (35)
<223> Ala in position 35 is amidated

<400> 190
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1               5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala
        35

<210> 191
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (35)
<223> Ala in position 35 is amidated

<400> 191
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1               5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala
        35

<210> 192
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence
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<220>
<221> AMIDATION
<222> (34)
<223> Gly in position 34 is amidated

<400> 192
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly

<210> 193
<211> 33
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (33)
<223> Ser in position 33 is amidated

<400> 193
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser

<210> 194
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (32)
<223> Ser in position 32 is amidated

<400> 194
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

<210> 195
<211> 32
<212> PRT

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (32)
<223> Ser in position 32 is amidated

<400> 195
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

<210> 196
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (31)
<223> Pro in position 31 is amidated

<400> 196
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro
20 25 30

<210> 197
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (30)
<223> Gly in position 30 is amidated

<400> 197
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly
20 25 30

<210> 198
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (29)
<223> Gly in position 29 is amidated

<400> 198
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly
20 25

<210> 199
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (31)
<223> Xaa in position 31 stands for tPro

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa in positions 36-38 stands for tPro

<220>
<221> AMIDATION
<222> (38)
<223> tPro in position 38 is amidated

<400> 199
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa
35

<210> 200
<211> 38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (36)..(38)

<223> Xaa in positions 36-38 stands for tPro

<220>
<221> AMIDATION
<222> (38)
<223> tPro in position 38 is amidated

<400> 200
His Gly Glu Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Xaa Xaa Xaa
        35

<210> 201
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (31)
<223> Xaa in position 31 stands for Nme

<220>
<221> VARIANT
<222> (36)..(37)
<223> Xaa in positions 36-37 stands for Nme

<220>
<221> AMIDATION
<222> (37)
<223> Nme in position 37 is amidated

<400> 201
His Gly Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa Xaa
        35

<210> 202
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (31)
<223> Xaa in position 31 stands for hPro

<220>
<221> VARIANT
<222> (36)
<223> Xaa in position 36 stands for hPro

<220>
<221> AMIDATION
<222> (36)
<223> hPro in position 36 is amidated

<400> 202
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
            20   25   30

Ser Gly Ala Xaa
        35

<210> 203
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (35)
<223> Ala in position 35 is amidated

<400> 203
His Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala
        35

<210> 204
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> AMIDATION
<222> (30)
<223> Gly in position 30 is amidated

<400> 204
His Gly Asp Ala Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly

20 25 30

<210> 205
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (39)
<223> Ser in position 39 is amidated

<400> 205
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 206
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (39)
<223> Ser in position 39 is amidated

<400> 206
Ala Gly Ala Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 207
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for
4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (26)
<223> Xaa in position 26 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (27)
<223> Asn in position 27 is amidated

<400> 207
Xaa Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu Glu
 1   5   10   15

Ala Val Arg Leu Phe Ile Glu Trp Leu Xaa Asn
            20   25

<210> 208
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for
      4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (26)
<223> Xaa in position 26 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (27)
<223> Asn in position 27 is amidated

<400> 208
Xaa Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu Glu
 1   5   10   15

Ala Val Arg Leu Phe Ile Glu Phe Leu Xaa Asn
            20   25

<210> 209
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for

4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (26)
<223> Xaa in position 26 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (29)
<223> Gly in position 29 is amidated

<400> 209
Xaa Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Trp Leu Xaa Asn Gly Gly
20 25

<210> 210
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for
4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (26)
<223> Xaa in position 26 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (29)
<223> Gly in position 29 is amidated

<400> 210
Xaa Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Phe Leu Xaa Asn Gly Gly
20 25

<210> 211
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for

4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (27)
<223> Xaa in position 27 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (27)
<223> Lys-NH(epsilon) octanoyl in position 27 is amidated

<400> 211
Xaa Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu Glu
 1   5   10   15

Ala Val Arg Leu Phe Ile Glu Trp Leu Asn Xaa
            20   25

<210> 212
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for
4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (27)
<223> Xaa in position 27 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (27)
<223> Lys-NH(epsilon) octanoyl

<400> 212
Xaa Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu Glu
 1   5   10   15

Ala Val Arg Leu Phe Ile Glu Phe Leu Asn Xaa
            20   25

<210> 213
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in positon 1 stands for

4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (27)
<223> Xaa in position 27 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (29)
<223> Gly in position 29 is amidated

<400> 213
Xaa Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Met Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Trp Leu Asn Xaa Gly Gly
20 25

<210> 214
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 stands for
4-Imidazolylpropionyl-Gly

<220>
<221> VARIANT
<222> (27)
<223> Xaa in position 27 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (29)
<223> Gly in position 29 is amidated

<400> 214
Xaa Glu Gly Thr Phe Thr Ser Ala Leu Ser Lys Gln Leu Glu Glu Glu
1 5 10 15

Ala Val Arg Leu Phe Ile Glu Phe Leu Asn Xaa Gly Gly
20 25

<210> 215
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (27)
<223> Xaa in position 27 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 215
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Xaa Asn
            20   25

<210> 216
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (27)
<223> Xaa in position 27 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (28)
<223> Asn in position 28 is amidated

<400> 216
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Xaa Asn
            20   25

<210> 217
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (27)
<223> Xaa in position 27 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (30)
<223> Gly in position 30 is amidated

<400> 217
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Xaa Asn Gly Gly
            20   25   30

<210> 218
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (27)
<223> Xaa in position 27 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (30)
<223> Gly in position 30 is amidated

<400> 218
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Xaa Asn Gly Gly
20 25 30

<210> 219
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT
<222> (28)
<223> Xaa in position 28 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (28)
<223> Lys-NH(epsilon) octanoyl in position 28 is amidated

<400> 219
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Asn Xaa
20 25

<210> 220
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> VARIANT

<222> (28)
<223> Xaa in position 28 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (28)
<223> Lys-NH(epsilon) octanoyl in position 28 is amidated

<400> 220
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Asn Xaa
            20   25

<210> 221
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (28)
<223> Xaa in position 28 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (30)
<223> Gly in position 30 is amidated

<400> 221
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Asn Xaa Gly Gly
            20   25   30

<210> 222
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> VARIANT
<222> (28)
<223> Xaa in position 28 stands for Lys-NH(epsilon) octanoyl

<220>
<221> AMIDATION
<222> (30)
<223> Gly in position 30 is amidated

<400> 222
Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Asn Xaa Gly Gly
            20   25   30

<210> 223
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> MOD_RES
<222> (12)
<223> Lys-PEG

<220>
<221> AMIDATION
<222> (39)
<223> Ser in position 39 is amidated

<400> 223
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
  1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
         35

<210> 224
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Amino Acid Sequence

<220>
<221> MOD_RES
<222> (27)
<223> Lys-PEG

<220>
<221> AMIDATION
<222> (39)
<223> Ser in position 39 is amidated

<400> 224
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
  1   5   10   15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
            20   25   30

Ser Gly Ala Pro Pro Pro Ser
         35

<210> 225

<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> MOD_RES
<222> (2)
<223> Lys-PEG

<220>
<221> AMIDATION
<222> (39)
<223> Ser in position 39 is amidated

<400> 225
His Lys Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 226
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> MOD_RES
<222> (5)
<223> Lys-PEG

<220>
<221> AMIDATION
<222> (39)
<223> Ser in position 39 is amidated

<400> 226
His Gly Glu Gly Lys Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 227
<211> 39
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Amino Acid Sequence

<220>
<221> MOD_RES
<222> (8)
<223> Lys-PEG

<220>
<221> AMIDATION
<222> (39)
<223> Ser in position 39 is amidated

<400> 227
His Gly Glu Gly Thr Phe Thr Lys Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 228
<211> 39
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<220>
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<223> Lys-PEG

<220>
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<223> Ser in position 39 is amidated

<400> 228
His Gly Glu Gly Thr Phe Thr Ser Asp Lys Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

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35

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<223> Lys-PEG

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<400> 229
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Lys Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 230
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Amino Acid Sequence

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<222> (13)
<223> Lys-PEG

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<223> Ser in position 39 is amidated

<400> 230
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Lys Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 231
<211> 39
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Amino Acid Sequence

<220>
<221> MOD_RES
<222> (16)
<223> Lys-PEG

<220>
<221> AMIDATION
<222> (39)
<223> Ser in position 39 is amidated

<400> 231
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Lys
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 232
<211> 39
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Amino Acid Sequence

<220>
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<223> Lys-PEG

<220>
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<222> (39)
<223> Ser in position 39 is amidated

<400> 232
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Lys Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 233
<211> 39
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Amino Acid Sequence

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<222> (19)
<223> Lys-PEG

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<222> (39)

<223> Ser in position 39 is amidated

<400> 233
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Lys Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 234
<211> 39
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Amino Acid Sequence

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<223> Lys-PEG

<220>
<221> AMIDATION
<222> (39)
<223> Ser in position 39 is amidated

<400> 234
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Lys Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 235
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Amino Acid Sequence

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<223> Lys-PEG

<220>
<221> AMIDATION
<222> (39)
<223> Ser in position 39 is amidated

<400> 235
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu

```
  1               5                  10                  15

Glu Ala Val Arg Leu Phe Ile Lys Trp Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala Pro Pro Pro Ser
         35


<210> 236
<211> 39
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      Amino Acid Sequence

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<222> (25)
<223> Lys-PEG

<220>
<221> AMIDATION
<222> (39)
<223> Ser in position 39 is amidated

<400> 236
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
  1               5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Lys Leu Lys Asn Gly Gly Pro Ser
            20                  25                  30

Ser Gly Ala Pro Pro Pro Ser
         35


<210> 237
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<223> Lys-PEG

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<223> Ser in position 39 is amidated

<400> 237
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
  1               5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Lys Gly Gly Pro Ser
            20                  25                  30
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Ser Gly Ala Pro Pro Pro Ser
35

<210> 238
<211> 39
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<220>
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Amino Acid Sequence

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<222> (29)
<223> Lys-PEG

<220>
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<222> (39)
<223> Ser in position 39 is amidated

<400> 238
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Lys Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 239
<211> 39
<212> PRT
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Amino Acid Sequence

<220>
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<222> (30)
<223> Lys-PEG

<220>
<221> AMIDATION
<222> (39)
<223> Ser in position 39 is amidated

<400> 239
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Lys Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

SEQUENCE LISTING

<110> ~~AMYLIN PHARMACEUTICALS, INC.~~ YOUNG, ANDREW
GEDULIN, BRONISLAVA

<120> METHODS FOR GLUCAGON SUPPRESSION

<130> 030639.0031.UTL (249/167 US)

<140> 09/889,331
<141> 2001-07-13

<150> PCT/US00/00942
<151> 2000-01-14

<150> 60/116,380
<151> 1999-01-14

<150> 60/132,017
<151> 1999-04-30

<150> 60/175,365
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<222> (39)
<223> Ser in position 39 is amidated

<400> 1
His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 2
<211> 39
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<213> Heloderma Suspectum

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20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

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<220>
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<220>
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<222> (31)
<223> Xaa at position 31 is N-methylalanine

<220>
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<222> (36)..(38)
<223> Xaa at positions 36, 37, and 38 is N-methylalanine

<220>
<221> MOD_RES
<222> (39)
<223> AMIDATION, Position 39 is Ser-NH2

<400> 40
His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

<210> 41
<211> ~~29~~38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Construct

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<222> (1)
<223> Xaa at position 1 is His, Arg or Tyr

<220>
<221> VARIANT

<222> (2)
<223> Xaa at position 2 is Ser, Gly Ala, or Thr

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<221> VARIANT
<222> (3)
<223> Xaa at position 3 is Asp or Glu

<220>
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<223> Xaa at position 5 is Ala or Thr

<220>
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<222> (6)
<223> Xaa at position 6 is Ala, Phe, Tyr or
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<220>
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<222> (7)
<223> Xaa at position 7 is Thr or Ser

<220>
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<220>
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<222> (9)
<223> Xaa at position 9 is Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa at position 10 is Ala, Leu, Ile, Val,
pentylglycine, or Met

<220>
<221> VARIANT
<222> (11)
<223> Xaa at position 11 is Ala or Ser

<220>
<221> VARIANT
<222> (12)
<223> Xaa at position 12 is Ala or Lys

<220>
<221> VARIANT
<222> (13)
<223> Xaa at position 13 is Ala or Gln

<220>
<221> VARIANT

<222> (14)
<223> Xaa at position 14 is Ala, Leu, Ile,
pentylglycine, Val or Met

<220>
<221> VARIANT
<222> (15)
<223> Xaa at position 15 is Ala or Glu

<220>
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<222> (16)..(17)
<223> Xaa at position 16 and 17 is Ala or Glu

<220>
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<222> (19)
<223> Xaa at position 19 is Ala or Val

<220>
<221> VARIANT
<222> (20)
<223> Xaa at position 20 is Ala or Arg

<220>
<221> VARIANT
<222> (21)
<223> Xaa at position 21 is Ala or Leu

<220>
<221> VARIANT
<222> (22)
<223> Xaa at position 22 is Ala, Phe, Tyr, or
naphthylalanine

<220>
<221> VARIANT
<222> (23)
<223> Xaa at position 23 is Ile, Val, Leu,
pentylglycine, tert-butylglycine, or Met

<220>
<221> VARIANT
<222> (24)
<223> Xaa at position 24 is Ala, Glu, or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa at position 25 is Ala, Trp, Phe, Tyr or
napthylalanine

<220>
<221> VARIANT
<222> (26)
<223> Xaa at position 26 is Ala or Leu

<220>
<221> VARIANT
<222> (27)
<223> Xaa at position 27 is Ala or Lys

<220>
<221> VARIANT
<222> (28)
<223> Xaa at position 28 is Ala or Asn and is optionally amidated

<220>
<221> VARIANT
<222> (29)

<223> may be absent and if present is optionally amidated

<220>
<221> VARIANT
<222> (30)
<223> may be absent and if present is optionally amidated

<220>
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<222> (31)
<223> Xaa at position ~~29 is OH, NH2, Gly-OH, Gly-NH2, Gly-Gly-OH, Gly-Gly-NH2 and further as in the specification~~ 31 is Pro, homoproline, thioproline, N-alkylalanine or absent and is optionally amidated

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<222> (32)
<223> may be absent and if present is optionally amidated

<220>
<221> VARIANT
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<223> may be absent and if present is optionally amidated

<220>
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<223> may be absent and if present is optionally amidated

<220>
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<223> may be absent and if present is optionally amidated

<220>
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<222> (36)
<223> Xaa at position 36 is Pro, homoproline, thioproline, N-alkylalanine or absent and is optionally amidated

<220>

<221> VARIANT
<222> (37)
<223> Xaa at position 37 is Pro, homoproline, thioproline, N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (38)
<223> Xaa at position 38 is Pro, homoproline, thioproline, N-alkylalanine or absent and is optionally amidated

<400> 41
Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa
35

<210> 42
<211> ~~2939~~
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (1)
<223> Xaa at position 1 is His, Arg, Tyr, Ala, norvaline, Val, or norleucine

<220>
<221> VARIANT
<222> (2)
<223> Xaa at position 2 is Ser, Gly, Ala, or Thr

<220>
<221> VARIANT
<222> (3)
<223> Xaa at position 3 is Ala, Asp, or Glu

<220>
<221> VARIANT
<222> (4)
<223> Xaa at position 4 is Ala, norvaline, Val, norleucine or Gly

<220>
<221> VARIANT
<222> (5)

<223> Xaa at position 5 is Ala or Thr

<220>
<221> VARIANT
<222> (6)
<223> Xaa at position 6 is Phe, Tyr, or napthylalanine

<220>
<221> VARIANT
<222> (7)
<223> Xaa at position 7 is Thr or Ser

<220>
<221> VARIANT
<222> (8)
<223> Xaa at position 8 is Ala, Ser, or Thr

<220>
<221> VARIANT
<222> (9)
<223> Xaa at position 9 is Ala, norvaline, norleucine,
Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa at position 10 is Ala, Leu, Ile, Val,
pentylglycine, or Met

<220>
<221> VARIANT
<222> (11)
<223> Xaa at position 11 is Ala of Ser

<220>
<221> VARIANT
<222> (12)
<223> Xaa at position 12 is Ala or Lys

<220>
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<222> (13)
<223> Xaa at position 13 is Ala or Gln

<220>
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<223> Xaa at position 14 is Ala, Leu, Ile,
pentylglycine, Val or Met

<220>
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<223> Xaa at positions 15, 16, and 17 is Ala or Glu

<220>
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<222> (19)
<223> Xaa at position 19 is Ala or Val

<220>
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<223> Xaa at position 20 is Ala or Arg

<220>
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<222> (21)
<223> Xaa at position 21 is Ala or Leu

<220>
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<222> (22)
<223> Xaa at position 22 is Phe, Tyr or napthylalanine

<220>
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<222> (23)
<223> Xaa at position 23 is Ile, Val, Leu,
pentylglycine, tert-butylglycine or Met

<220>
<221> VARIANT
<222> (24)
<223> Xaa at position 24 is Ala, Glu or Asp

<220>
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<222> (25)
<223> Xaa at position 25 is Ala, Trp, Phe, Tyr or
napthylalanine

<220>
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<222> (26)
<223> Xaa at position 26 is Ala or Leu

<220>
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<223> Xaa at position 27 is Ala or Lys

<220>
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<222> (28)
<223> Xaa at position 28 is Ala or Asn

<220>
<221> VARIANT
<222> (29)

<223> may be absent and is optionally amidated

<220>

<221> VARIANT
<222> (30)
<223> may be absent and is optionally amidated

<220>
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<222> (31)
<223> Xaa at position ~~29 is OH, NH2, Gly-OH, Gly-NH2, Gly-Gly-OH, Gly-Gly-NH2 and further as indicated in the specification~~31 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent

<220>
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<222> (32)
<223> may be absent and is optionally amidated

<220>
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<223> may be absent and is optionally amidated

<220>
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<222> (36)
<223> Xaa at position 36 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
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<222> (37)
<223> Xaa at position 37 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (38)
<223> Xaa at position 38 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (39)
<223> Xaa at position 39 is Ser, Tyr or absent and is optionally

amidated

<400> 42
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Xaa
35

<210> 43
<211> ~~29~~38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Construct

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<222> (1)
<223> Xaa at position1 is His or Arg

<220>
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<222> (2)
<223> Xaa at position 2 is Gly or Ala

<220>
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<222> (3)
<223> Xaa at position 3 is Asp or Glu

<220>
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<223> Xaa at position 5 is Ala or Thr

<220>
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<222> (6)
<223> Xaa at position 6 is Ala, Phe, or napthylalanine

<220>
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<222> (7)
<223> Xaa at position 7 is Ser, or Thr

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<223> Xaa at position 8 is Ala, Ser, or Thr

<220>
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<222> (9)
<223> Xaa at position 9 is Asp or Glu

<220>
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<222> (10)
<223> Xaa at position 10 is Ala, Leu, or pentylglycine

<220>
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<222> (11)
<223> Xaa at position 11 is Ala or Ser

<220>
<221> VARIANT
<222> (12)
<223> Xaa at position 12 is Ala or Lys

<220>
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<222> (13)
<223> Xaa at position 13 Ala or Gln

<220>
<221> VARIANT
<222> (14)
<223> Xaa at position 14 is Ala, Leu or pentylglycine

<220>
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<222> (15)..(17)
<223> Xaa at positions 15, 16, and 17 is Ala or Glu

<220>
<221> VARIANT
<222> (19)
<223> Xaa at position 19 is Ala or Val

<220>
<221> VARIANT
<222> (20)
<223> Xaa at position 20 is Ala or Arg

<220>
<221> VARIANT
<222> (21)
<223> Xaa at position 21 is Ala or Leu

<220>
<221> VARIANT
<222> (22)
<223> Xaa at position 22 is Phe or napthylalanine

<220>

<221> VARIANT
<222> (23)
<223> Xaa at position 23 is Ile, Val or
tert-butylglycine

<220>
<221> VARIANT
<222> (24)
<223> Xaa at position 24 is Ala, Glu or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa at position 25 is Ala, Trp or Phe

<220>
<221> VARIANT
<222> (26)
<223> Xaa at position 26 is Ala or Leu

<220>
<221> VARIANT
<222> (27)
<223> Xaa at position is Ala or Lys

<220>
<221> VARIANT
<222> (28)
<223> Xaa at position 28 is Ala or Asn

<220>
<221> VARIANT
<222> (29)

<223> may be absent and is optionally amidated

<220>
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<222> (30)
<223> may be absent and is optionally amidated

<220>
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<223> Xaa at position ~~29 is -OH, -NH2, Gly-OH, Gly-NH2, Gly-Gly-Oh, Gly-Gly-NH2, and further as indicated in the specification~~ 31 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
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<220>
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<223> may be absent and is optionally amidated

<220>
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<222> (36)
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<220>
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<222> (37)
<223> Xaa at position 37 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
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<222> (38)
<223> Xaa at position 38 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<400> 43
Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa
35

<210> 44
<211> ~~29~~39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (1)

<223> Xaa in position 1 is His or Ala

<220>
<221> VARIANT
<222> (2)
<223> Xaa in position 2 is Gly or Ala

<220>
<221> VARIANT
<222> (3)
<223> Xaa in position 3 is Ala, Asp or Glu

<220>
<221> VARIANT
<222> (4)
<223> Xaa in position 4 is Ala or Gly

<220>
<221> VARIANT
<222> (5)
<223> Xaa in position 5 is Ala or Thr

<220>
<221> VARIANT
<222> (6)
<223> Xaa in position 6 is Phe or napthylalanine

<220>
<221> VARIANT
<222> (7)
<223> Xaa in position 7 is Thr or Ser

<220>
<221> VARIANT
<222> (8)
<223> Xaa in position 8 is Ala, Ser or Thr

<220>
<221> VARIANT
<222> (9)
<223> Xaa in position 9 is Ala, Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa in position 10 is Ala, Leu or pentylglycine

<220>
<221> VARIANT
<222> (11)
<223> Xaa in position 11 is Ala or Ser

<220>
<221> VARIANT
<222> (12)
<223> Xaa in position 12 is Ala or Lys

<220>
<221> VARIANT
<222> (13)
<223> Xaain position 13 is Ala or Gln

<220>
<221> VARIANT
<222> (14)
<223> Xaa in position 14 is Ala, Leu, Met or
pentylglycine

<220>
<221> VARIANT
<222> (15)..(17)
<223> Xaa in positions 15, 16 & 17 is Ala or Glu

<220>
<221> VARIANT
<222> (19)
<223> Xaa in position 19 is Ala or Val

<220>
<221> VARIANT
<222> (20)
<223> Xaa in position 20 is Ala or Arg

<220>
<221> VARIANT
<222> (21)
<223> Xaa in position 21 is Ala or Leu

<220>
<221> VARIANT
<222> (22)
<223> Xaa at position 22 is Phe or napthylalanine

<220>
<221> VARIANT
<222> (23)
<223> Xaa at position 23 is Ile, Val or
tert-butylglycine

<220>
<221> VARIANT
<222> (24)
<223> Xaa at position 24 is Ala, Glu or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa at position 25 is Ala, Trp or Phe

<220>
<221> VARIANT
<222> (26)

<223> Xaa at position 26 is Ala or Leu

<220>
<221> VARIANT
<222> (27)
<223> Xaa at position 27 is Ala or Lys

<220>
<221> VARIANT
<222> (28)
<223> Xaa at position 28 is Ala or Asn

<220>
<221> VARIANT
<222> (29)

<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (30)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position ~~29 is OH, NH2, Gly-OH, Gly-NH2, Gly-Gly-OH, Gly-Gly-NH2 and further as indicated in the specification~~ 31 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (32)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (33)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (34)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (35)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (36)
<223> Xaa at position 36 is Pro, homoproline, 3Hyp, 4Hyp, thiproline

N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent
and is optionally amidated

<220>
<221> VARIANT
<222> (37)
<223> Xaa at position 37 is Pro, homoproline, 3Hyp, 4Hyp, thiproline
N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent
and is optionally amidated

<220>
<221> VARIANT
<222> (38)
<223> Xaa at position 38 is Pro, homoproline, 3Hyp, 4Hyp, thiproline
N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent
and is optionally amidated

<220>
<221> VARIANT
<222> (39)
<223> may be absent and is optionally amidated

<400> 44
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser
35

<210> 45
<211> ~~28~~38
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Construct

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 is His, Arg, Tyr or
4-imidazopropionyl

<220>
<221> VARIANT
<222> (2)
<223> Xaa in positon 2 is Ser, Gly, Ala or Thr

<220>
<221> VARIANT
<222> (3)

<223> Xaa in position 3 is Asp or Glu

<220>
<221> VARIANT
<222> (5)
<223> Xaa in position 5 is Ala or Thr

<220>
<221> VARIANT
<222> (6)
<223> Xaa in position 6 is Ala, Phe, Tyr or
napthylalanine

<220>
<221> VARIANT
<222> (7)
<223> Xaa in position 8 is Thr or Ser

<220>
<221> VARIANT
<222> (8)
<223> Xaa in position 8 is Ala, Ser or Thr

<220>
<221> VARIANT
<222> (9)
<223> Xaa in position 9 is Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa in position 10 is Ala, Leu, Ile, Val,
pentylglycine or Met

<220>
<221> VARIANT
<222> (11)
<223> Xaa in position 11 is Ala or Ser

<220>
<221> VARIANT
<222> (12)
<223> Xaa in position 12 is Ala or Lys

<220>
<221> VARIANT
<222> (13)
<223> Xaa in position 13 is Ala or Gln

<220>
<221> VARIANT
<222> (14)
<223> Xaa in position 14 is Ala, Leu, Ile,
pentylglycine, Val or Met

<220>
<221> VARIANT

<222> (15)..(17)
<223> Xaa in positions 15, 16 & 17 is Ala or Glu

<220>
<221> VARIANT
<222> (19)
<223> Xaa in position 19 is Ala or Val

<220>
<221> VARIANT
<222> (20)
<223> Xaa in position 20 is Ala or Arg

<220>
<221> VARIANT
<222> (21)
<223> Xaa in position 21 is Ala, Leu, Lys-NH3-R where R is Lys, Arg, C1-C10 straight chain or branched alkanoyl or cycloalkanoyl

<220>
<221> VARIANT
<222> (22)
<223> Xaa in position 22 is Phe, Tyr, or naphthylalanine

<220>
<221> VARIANT
<222> (23)
<223> Xaa at position 23 is Ile, Val, Leu, pentylglycine, tert-butylglycine or Met

<220>
<221> VARIANT
<222> (24)
<223> Xaa at position 24 is Ala, Glu or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa at position 25 is Ala, Trp, Phe, Tyr or naphthylalanine

<220>
<221> VARIANT
<222> (26)
<223> Xaa at position 26 is Ala or Leu

<220>
<221> VARIANT
<222> (27)
<223> Xaa at position 27 is Lys~~-~~, Asn, ~~Asn-~~Ala, Lys~~,~~ -NH-epsilon-R ~~Lys-NH3-R-Asn, Asn-Lys-NH3-R, Lys-NH3-R-Ala, Ala-Lys-NH3-R,~~ where R is Lys, Arg, C1-C10 straight chain or branched alkanoyl or cycloalkylalkanoyl and is optionally amidated

<220>
<221> VARIANT
<222> (28)
<223> Xaa at position 28 is ~~OH, NH2, Gly-OH, Gly-NH2,~~ Lys, Asn, Ala, Lys-NH-epsilon-R
~~Gly-Gly-OH, Gly-Gly-NH2 and further as indicated in the specification~~
where R is Lys, Arg, C1-C10 straight chain or branched alkanoyl or cycloalkylalkanoyl and is optionally amidated

<220>
<221> VARIANT
<222> (29)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (30)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (32)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (33)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (34)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (35)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (36)
<223> Xaa at position 36 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT

<222> (37)
<223> Xaa at position 37 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (38)
<223> Xaa at position 38 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<400> 45
Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa
35

<210> 46
<211> ~~28~~39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 is His, Arg, Tyr, Ala, norvaline, Val norleucine, or 4-imidazopropionyl

<220>
<221> VARIANT
<222> (2)
<223> Xaa in position 2 is Ser, Gly, Ala, or Thr

<220>
<221> VARIANT
<222> (3)
<223> Xaa in position 3 is Ala, Asp, or Glu

<220>
<221> VARIANT
<222> (4)
<223> Xaa in position 4 is Ala, norvaline, Val, norleucine or Gly

<220>

<221> VARIANT
<222> (5)
<223> Xaa in position 5 is Ala or Thr

<220>
<221> VARIANT
<222> (6)
<223> Xaa in position 6 is Phe, Tyr or napthylalanine

<220>
<221> VARIANT
<222> (7)
<223> Xaa in position 7 is Thr or Ser

<220>
<221> VARIANT
<222> (8)
<223> Xaa in position 8 is Ala, Ser or Thr

<220>
<221> VARIANT
<222> (9)
<223> Xaa in position 9 is Ala, Norvaline, Val,
Norleucine, Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa in position 10 is Ala, Leu, Ile, Val
pentylglycine or Met

<220>
<221> VARIANT
<222> (11)
<223> Xaa in position 11 is Ala or Ser

<220>
<221> VARIANT
<222> (12)
<223> Xaa in position 12 is Ala or Lys

<220>
<221> VARIANT
<222> (13)
<223> Xaa in position 13 is Ala or Gln

<220>
<221> VARIANT
<222> (14)
<223> Xaa in position 14 is Ala, Leu, Ile, pentylglycine
Val or Met

<220>
<221> VARIANT
<222> (15)..(17)
<223> Xaa in positions 15, 16 & 17 stands for Ala or Glu

<220>
<221> VARIANT
<222> (19)
<223> Xaa in position 19 is Ala or Val

<220>
<221> VARIANT
<222> (20)
<223> Xaa in position 20 is Ala or Arg

<220>
<221> VARIANT
<222> (21)
<223> Xaa in position 21 is Ala, Leu or Lys-NH3 where R
is Lys, Arg, C1-C10 straight chain or branched
alkanoyl or cycloalleyl-alkanoyl

<220>
<221> VARIANT
<222> (22)
<223> Xaa at position 22 is Phe, Tyr or naphthylalanine

<220>
<221> VARIANT
<222> (23)
<223> Xaa at position 23 is Ile, Val, Leu, pentylglycine,
tert-butylglycine or Met

<220>
<221> VARIANT
<222> (24)
<223> Xaa at position 24 is Ala, Glu or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa at position 25 is Ala, Trp, Phe, Tyr
or naphthylalanine

<220>
<221> VARIANT
<222> (26)
<223> Xaa at position 26 is Ala or Leu

<220>
<221> VARIANT
<222> (27)
<223> Xaa at position 27 is Lys-, Asn, ~~Asn-~~Ala, Lys~~,~~-NH-epsilon-R
~~Lys-NH3-R-Asn, Asn-Lys-NH3-R, Lys-NH3-R-Ala,~~
~~Ala-Lys-NH3-R,~~ where R is Lys, Arg, C1-C10 straight chain
or
branched alkanoyl or cycloalkylalkanoyl and is
optionally amidated

<220>
<221> VARIANT
<222> (28)

<223> Xaa at position 28 is ~~OH, NH2, Gly-OH, Gly-NH2,~~Lys, Asn, Ala, Lys-NH-epsilon-R
~~Gly-Gly-OH, Gly-Gly-NH2 and further as indicated in the specification~~
where R is Lys, Arg, C1-C10 straight chain or branched alkanoyl or cycloalkylalkanoyl and is optionally amidated

<220>
<221> VARIANT
<222> (29)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (30)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (31)
<223> Xaa at position 31 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (32)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (33)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (34)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (35)
<223> may be absent and is optionally amidated

<220>
<221> VARIANT
<222> (36)
<223> Xaa at position 36 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (37)
<223> Xaa at position 37 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent

and is optionally amidated

<220>
<221> VARIANT
<222> (38)
<223> Xaa at position 38 is Pro, homoproline, 3Hyp, 4Hyp, thiproline N-alkylglycine, N-alkylpentylglycine N-alkylalanine or absent and is optionally amidated

<220>
<221> VARIANT
<222> (39)
<223> Xaa at position 39 is Ser, Tyr or absent and is optionally amidated

<400> 46
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Ala Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Xaa
35

<210> 47
<211> ~~40~~39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 is His, Arg or Thr

<220>
<221> VARIANT
<222> (2)
<223> Xaa in position 2 is Ser, Gly, Ala, or Thr

<220>
<221> VARIANT
<222> (3)
<223> Xaa in position 3 is Asp or Glu

<220>
<221> VARIANT
<222> (6)
<223> Xaa in position 6 is Phe, Tyr or naphthalanine

<220>
<221> VARIANT
<222> (7)
<223> Xaa in position 7 is Thr or Ser

<220>
<221> VARIANT
<222> (8)
<223> Xaa in position 8 is Ser or Thr

<220>
<221> VARIANT
<222> (9)
<223> Xaa in position 9 is Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa in position 10 is Leu, Ile, Val, pentylglycine
or Met

<220>
<221> VARIANT
<222> (14)
<223> Xaa at position 14 is Leu, Ile, pentylglycine,
Val or Met

<220>
<221> VARIANT
<222> (22)
<223> Xaa in position 22 is Phe, Tyr or naphthylalanine

<220>
<221> VARIANT
<222> (23)
<223> Xaa in position 23 is Ile, Val, Leu,
pentylglycine, tert-butylglycine or Met

<220>
<221> VARIANT
<222> (24)
<223> Xaa in position 24 is Glu or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa in position 25 is Trp, Phe, Tyr or
naphthylalanine

<220>
<221> VARIANT
<222> (31)
<223> Xaa in position 31 is independently Pro,
homoproline, 3-hydroxproline, 4-hydroxyproline,
thioproline, N-alkylglycine, N-alkylpentylglycine
or N-alkylalanine

<220>
<221> VARIANT
<222> (36)..(38)
<223> Xaa in positions 36, 37 & 38 is independently Pro, homoproline, 3-hydroxyproline, 4-hydroxproline, thioproline, N-alkylglycine, N-alkylpentylglycine or N-alkylalanine

<220>
<221> VARIANT
<222> (39)
<223> Xaa in position 39 is Ser, Thr or Tyr~~<220>~~ and is
~~<221> VARIANT~~
~~<222> (40)~~
~~<223> Xaa in position 40 is OH or NH3, with the proviso that the compound does not have the formula of either SEQ. ID. NOS. 1 or 2~~
optionally amidated

<400> 47
Xaa Xaa Xaa Gly Thr Xaa Xaa Xaa Xaa Xaa Ser Lys Gln Xaa Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Xaa Xaa Xaa Xaa Leu Lys Asn Gly Gly Xaa Ser
20 25 30

Ser Gly Ala Xaa Xaa Xaa Xaa~~-Xaa~~
35 ~~40~~

<210> 48
<211> ~~40~~39
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Construct

<220>
<221> VARIANT
<222> (1)
<223> Xaa in position 1 is His, Arg, Tyr or 4-imidazopropionyl

<220>
<221> VARIANT
<222> (2)
<223> Xaa in position 2 is Ser, Gly, Ala or Thr

<220>
<221> VARIANT
<222> (3)
<223> Xaa in position 3 is Asp or Glu

<220>

<221> VARIANT
<222> (6)
<223> Xaa in position 6 is Phe, Tyr or naphthylalanine

<220>
<221> VARIANT
<222> (7)..(8)
<223> Xaa in positions 7 & 8 is Thr or Ser

<220>
<221> VARIANT
<222> (9)
<223> Xaa in position 9 is Asp or Glu

<220>
<221> VARIANT
<222> (10)
<223> Xaa in position 10 is Leu, Ile, Val, pentylglycine or Met

<220>
<221> VARIANT
<222> (14)
<223> Xaa at position 14 is Leu, Ile, pentylglycine, Val or Met

<220>
<221> VARIANT
<222> (22)
<223> Xaa in position 22 is Phe, Tyr or naphthylalanine

<220>
<221> VARIANT
<222> (23)
<223> Xaa in position 23 is Ile, Val, Lu, pentylglycine, tert-butylglycine or Met

<220>
<221> VARIANT
<222> (24)
<223> Xaa in position 24 is Glu or Asp

<220>
<221> VARIANT
<222> (25)
<223> Xaa in position 25 is Trp, Phe, Tyr, or naphthylalanine

<220>
<221> VARIANT
<222> (27)
<223> Xaa ~~in~~at position 27 is Lys~~-~~, Asn~~-Lys~~, Ala, Lys-NH~~3~~-epsilon-R~~-Asn, Asn-Lys-NH3-R-~~where R is Lys, Arg, C1-C10 straight chain or ~~chain or ~~branched alkanoyl or cycloalkylalkanoyl

<220>

<221> VARIANT
<222> (~~30~~28)
<223> Xaa at position 28 is Lys, Asn, Ala, Lys-NH-epsilon-R
where R is Lys, Arg, C1-C10 straight chain or
branched alkanoyl or cycloalkylalkanoyl

<220>
<221> VARIANT
<222> (31)
<223> Xaa in position is independently Pro,
homoproline, 3-hydroxproline, 4-hydroxyproline,
thioproline, N-alkylglycine, N-alkylpentylglycine
or N-alkylalanine

<220>
<221> VARIANT
<222> (~~35~~36)..(~~39~~38)
<223> Xaa in positions ~~35~~36-~~39~~38 is independently Pro,
homoproline, 3-hydroxproline, 4-hydroxyproline,
thioproline, N-alkylglycine, N-alkylpentylglycine
or N-alkylalanine

<220>
<221> VARIANT
<222> (~~40~~39)
<223> Xaa in position ~~40 is -OH or NH2, with the proviso~~39 is Ser, Thr or Tyr
and is optionally
~~that the compound does not have the formula of~~
~~either SEQ. ID. NOS. 1 or 2~~
amidated

<400> 48
Xaa Xaa Xaa Gly Thr Xaa Xaa Xaa Xaa Xaa Ser Lys Gln Xaa Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Xaa Xaa Xaa Xaa Leu Xaa Xaa Gly Gly Xaa Ser ~~Ser~~
20 25 30

Ser Gly Ala Xaa Xaa Xaa Xaa ~~Xaa Xaa~~
35 ~~40~~

<210> 49
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Amino Acid Sequence

<220>
<221> AMIDATION
<222> (30)
<223> Gly in position 30 is amidated